

PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION  
International Bureau



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification <sup>6</sup> : <b>A61K 38/18</b>		A1	(11) International Publication Number: <b>WO 98/50060</b> (43) International Publication Date: 12 November 1998 (12.11.98)
(21) International Application Number: <b>PCT/US98/03197</b>		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).	
(22) International Filing Date: <b>5 May 1998 (05.05.98)</b>			
(30) Priority Data: <b>60/045,619</b> 5 May 1997 (05.05.97) US			
(71) Applicant ( <i>for all designated States except US</i> ): CREATIVE BIOMOLECULES, INC. [US/US]; 45 South Street, Hopkinton, MA 01748 (US).			
(72) Inventors; and		Published	
(75) Inventors/Applicants ( <i>for US only</i> ): SAMPATH, Kuber, T. [US/US]; 98 Pamela Drive, Holliston, MA 01746 (US). COHEN, Charles, M. [US/US]; 1 Harrington Lane, Weston, MA 02193 (US).		With international search report.	
(74) Agent: TWOMEY, Michael, J.; Testa, Hurwitz & Thibeault LLP, High Street Tower, 125 High Street, Boston, MA 02110 (US).			

(54) Title: THERAPIES FOR ACUTE RENAL FAILURE

(57) Abstract

The present invention provides methods for the treatment, and pharmaceuticals for use in the treatment, of mammalian subjects in, or at risk of, acute renal failure, or subject to, or at risk of, inflammation, neutrophil-mediated cell damage, and apoptosis resulting from tissue damage or injury. The methods involve the administration of certain proteins of the osteogenic protein/bone morphogenetic protein (OP/BMP) family within the TGF- $\beta$  superfamily of proteins.